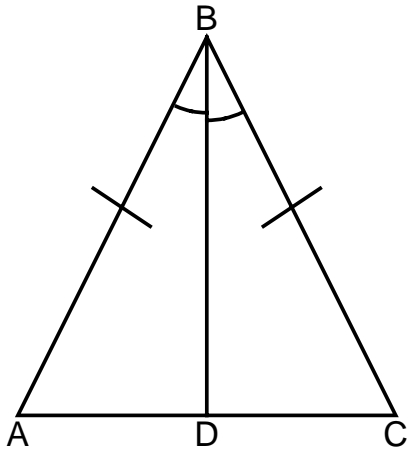


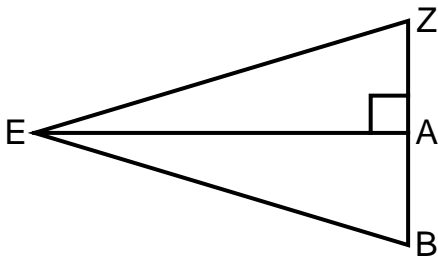
Worksheet 5.2: Congruent Triangles I

Decide whether you can use the SSS, SAS, ASA Postulate or the AAS Theorem to prove the triangles congruent. If so, write the congruence and identify the postulate or theorem. If not, write *not possible*.

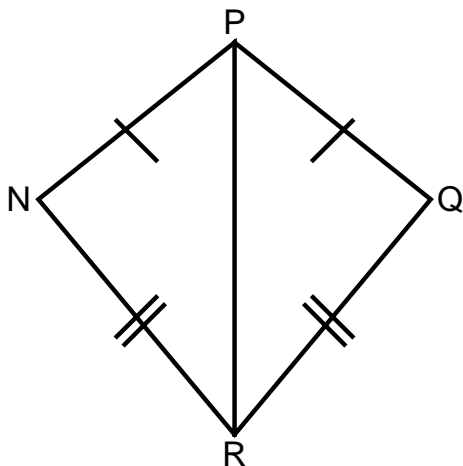
1.



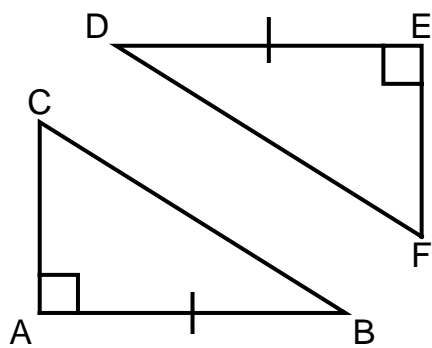
2.



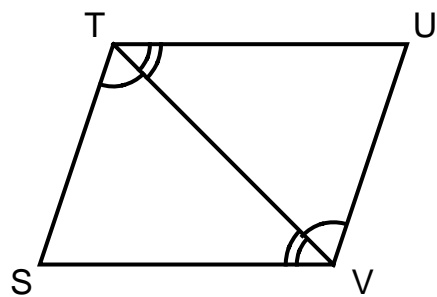
3.



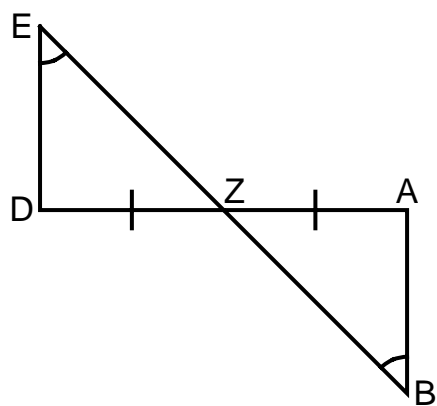
4.



5.



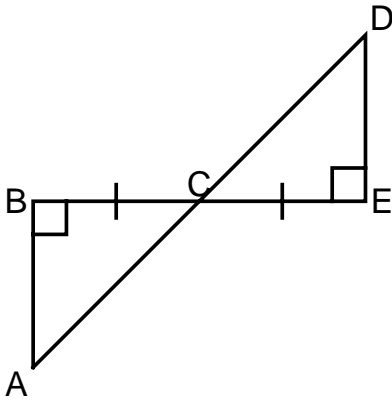
6.



Write proofs for each of the following.

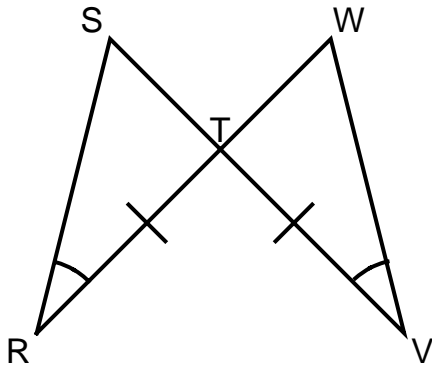
7. Given: $\angle B$ and $\angle E$ are right angles, and $\overline{BC} \cong \overline{EC}$.

Prove: $\triangle ABC \cong \triangle DEC$



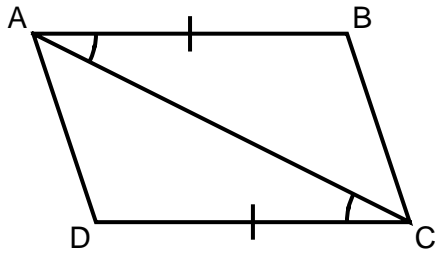
8. Given: $\angle R \cong \angle V$, $\overline{RT} \cong \overline{TV}$

Prove: $\triangle RST \cong \triangle VWT$



9. Given: $\overline{AB} \cong \overline{DC}$, $\angle BAC \cong \angle DCA$

Prove: $\triangle ABC \cong \triangle CDA$



10. Given: $\overline{EF} \cong \overline{FG}$, $\overline{DF} \cong \overline{FH}$

Prove: $\triangle DFE \cong \triangle HFG$

